

Date: Sat, 27 Mar 93 08:00:29 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #383  
To: Info-Hams

Info-Hams Digest                      Sat, 27 Mar 93                      Volume 93 : Issue    383

Today's Topics:

                                  "CB transplants"  
      \$40.00 Radio Shack SWR meter problems (3 msgs)  
                                  Alinco Radios  
                                  feeding dipole with 300-ohm twinlead  
                                  Help: study guide for 4A & 4B exams.  
                                  Kenwood cw filter (and incorrect offset)  
                                  Nicad Memory Effect-Fact or Myth?  
                                  Q values.  
                                  Real OFs (Was Re: Real NoCodes)  
                                  Which keyer chip best?  
                                  ~r{d8d8

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 26 Mar 93 22:28:37 GMT  
From: ogicse!uwm.edu!cs.utexas.edu!asuvax!chnews!joshua!jbromley@network.UCSD.EDU  
Subject: "CB transplants"  
To: info-hams@ucsd.edu

In article <12182@news.duke.edu> jbs@ee.egr.duke.edu (Joe B. Simpson) writes:

[deleted]

>  
>Okay, here's a little quiz. How many of you \*never\* used a CB before  
>becoming a ham?

>  
>The rest of you, hang your heads in shame; you're "CB transplants."  
>Yes, that includes \*you\*.  
>  
> -joe  
> KD4LLV  
> What class the license is is \*my\* business.  
>--

But...but...but...I \*never\* inhaled!

```
+-----+-----+
| Jim Bromley W5GYJ | |
| Intel Corp. m/s CH3-91 | Celebrating 30 years as a No-Code Technician |
| 5000 W. Chandler Blvd. | |
| Chandler,AZ 85226 | |
| tel: 602-554-5183 | Internet: jrbromley@sedona.intel.com |
+-----+-----+
```

-----  
Date: 26 Mar 93 22:03:29 GMT  
From: ogicse!emory!europa.eng.gtefsd.com!gatech!concert!rti!jhw@network.UCSD.EDU  
Subject: \$40.00 Radio Shack SWR meter problems  
To: info-hams@ucsd.edu

I purchased one of these gadgets to use with my ICOM-211 for reading power output (The 211 already has an SWR meter inside it). I found that when I inserted the RS Power/SWR meter in line, the SWR indication on the 211 rose to an unacceptably high level (2.5 or 3:1 I don't remember exactly).

I can understand having a correction graph as an alternative to an SWR "calibrate" control, but I couldn't make any sense out of the graph on the back of the RS meter. It would seem to me that the graph should indicate a unity correction for powers within the range where you could use the meter direct, i.e., without use of the correction table -- like 10 to 15 W on the low power setting, (again, if I remember the instructions correctly), but I seem to remember that the correction graph on the meter implied a correction for SWR readings taken at the power range where the readings were supposed to be valid.

So, I returned it to RS and got my money back.

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Date: 27 Mar 93 00:27:56 GMT

From: ogicse!uwm.edu!cs.utexas.edu!asuvax!chnews!joshua!jbromley@network.UCSD.EDU  
Subject: \$40.00 Radio Shack SWR meter problems  
To: info-hams@ucsd.edu

In article <C4IJIn.6Go@hpuerca.atl.hp.com> edh@hpuerca.atl.hp.com (Ed Humphries) writes:

[mei.mon's quote deleted]

>My RS version has a nice little chart printed on the back that  
>you are supposed to use to adjust the reading you get to the  
>correct (approximate) reading.

>Cheers & 73 Ed Humphries N5RCK  
>Hewlett-Packard NARC Atlanta GA  
>edh@hpuerca.atl.hp.com

What a bunch of wimps! { ;- ) satire follows }

\*\*\*REAL\*\*\* hams can calculate SWR from forward and reflected power  
by evaluating the following FORTRAN expression in their heads:

$$SWR = (1 + \sqrt{RPWR/FPWR}) / (1 - \sqrt{RPWR/FPWR})$$

```
+-----+-----+
| Jim Bromley W5GYJ | | Celebrating 30 years as a No-Code Technician |
| Intel Corp. m/s CH3-91 | | 5000 W. Chandler Blvd. |
| 5000 W. Chandler Blvd. | | Chandler,AZ 85226 |
| Chandler,AZ 85226 | | tel: 602-554-5183 |
| tel: 602-554-5183 | | Internet: jbromley@sedona.intel.com |
+-----+-----+
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Date: Fri, 26 Mar 1993 20:41:59 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!cs.utexas.edu!zaphod.mps.ohio-  
state.edu!news.acns.nwu.edu!casbah.acns.nwu.edu!rdewan@network.UCSD.EDU  
Subject: \$40.00 Radio Shack SWR meter problems  
To: info-hams@ucsd.edu

In article <1ov9ohINNfg9@hp-col.col.hp.com> bobw@col.hp.com (Bob Witte) writes:

>bat@gdstech.GRUMMAN.COM (Pat Masterson) writes:

>> Can you guys explain to a Bozo (me) how to use that correction graph  
>> on the back of the meter? I have RTFMd several times, it seems  
>> a tad bit inadequate. Thanks.  
>> --

Description deleted for brevity.

>  
> So having written all this down, I suggest you throw away any radio  
> that does not operate in the 10 to 15 W or 25 to 40 W range if you  
> are going to use this meter. :-) Seriously, I like the meter just  
> fine for quick, gross checks but not for fine measurements.  
>

Or how about:

Measure the forward power:  $P_f$

Measure the reverse power,  $P_r$ , by hooking up the antenna on the  
transmitter jack and vice versa.

Dig out your slide rule and compute  $(1+\sqrt{P_r/P_f})/(1-\sqrt{P_r/P_f})$ .

The meter measures power quite well (some one posted comparisons  
with a Bird a while back) and has pretty good isolation.

This should give you a pretty good indication of the SWR.

> Hope this helps,

Rajiv

aa9ch

Address: r-dewan@nwu.edu

Phone: None. Only CW.

-----  
Date: 26 Mar 93 21:12:23 GMT  
From: ogicse!uwm.edu!linac!att!att-out!cbnews1!dara@network.UCSD.EDU  
Subject: Alinco Radios  
To: info-hams@ucsd.edu

Jay I tried to contact you via internet e-mail. I am interested  
in the DR1200.  
Shel dara@physics.att.com

-----  
Date: 26 Mar 93 21:52:35 GMT  
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!darwin.sura.net!convex!  
tonyp@network.UCSD.EDU  
Subject: feeding dipole with 300-ohm twinlead  
To: info-hams@ucsd.edu

Well, dang - I've got my 3,000' of copperweld, and now the poison  
oak has come into season.

I ain't climbing no oak trees to run the rhombic with \*that\* stuff  
around! :-)

Next thing:

I can "safely" get to about 150' of trees.

The matchbox will handle a balanced load.

I seem to recall that you want to make the lead-in be a certain length against the dipole.

- o How long should the 300-ohm be?

- o How long should the antenna be?

--

Tony J. Podrasky  
San Diego , Ca  
tonyp@convex.com  
WA2EAA / WEAA / MAZEAAA?

Remember:  
If nature had meant for man to operate  
CW she would have made us with  
little tiny whistles in our throats

-----  
Date: 26 Mar 93 19:38:18 GMT  
From: anomaly.sbs.com!n1mpq!news@uunet.uu.net  
Subject: Help: study guide for 4A & 4B exams.  
To: info-hams@ucsd.edu

HOFFMANMK@CONRAD.APPSTATE.EDU (Marvin Hoffman) writes:

> In <1993Mar24.164337.25413@hemlock.cray.com> dadams@cray.com writes:  
>  
> (stuff deleted)  
>  
>  
>  
>> I notice that the exam for "Advanced" class uses many more pictures than  
>> the exam for "General". I also notice that Radio Shack does not carry  
>> a study guide for Advanced or Extra.  
>  
>  
> Last week the Radio Shack in Boone, NC, which had been just done over  
> to be a "new Radio Shack" started carrying a Gordon West Radio Shack  
> Advanced study guide, comparable to the General that they have carried  
> for some time. Perhaps your store has the material which said "New!!"  
> on its packaging.

I was surprised to see that in my local RS store. Sure, after I bought the ARRL book for the Advanced class and actually LEARNED the theory

when I could've just done the rote memorization route. {sigh}

Now if only they'd carry one for Extra, that'd be a trip. :)

Tony

```
-----
-- Anthony S. Pelliccio, kd1nr          // A man who feels sees life as //
-- system @ garlic.sbs.com             // a tragedy, a man who thinks //
-----// sees life as a comedy. (This //
-- Flame Retardent Sysadmin           // was in my fortune cookie!) //
-----
-- This is a calm .sig! --
-----
```

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Date: 26 Mar 93 21:07:31 GMT
From: ogicse!uwm.edu!linac!att!att-out!cbnews!dara@network.UCSD.EDU
Subject: Kenwood cw filter (and incorrect offset)
To: info-hams@ucsd.edu
```

```
In article <1993Mar25.160215.1318@lynx.dac.northeastern.edu>,
lkay@lynx.dac.northeastern.edu (leonard kay) writes:
> In article <1993Mar24.212916.14685@cbnews1.cb.att.com>,
>   dara@cbnews1.cb.att.com (s.b.darack) writes:
>
> > I recently tried to verify the offset of my Kenwood TS440S in cw mode and
> > also examine the shape of my 500 Hz filter. I did this by tuning to a
> >
> > Anyone care to comment, verify my results, or... ?
> > 73  Shel  WA2UBK  dara@physics.att.com
>
> WOW! Shel, I have the *exact* same problem on my TS-820S. I bought it used,
> so I always thought it was something that drifted out of alignment that
> I would fix the next time I put it on the bench and tuned it up. But I'm
> not sure now! Another example of the classic scenario where you think you're
> the only one in the world with your problem :-(.....
>
>
>
```

Len:

I made a similar check of my 1.8 KHz filter and found the passband center frequency is 1650 Hz. The ts440 does not have a xtal calibrator or VBT. It has IF shift. I find that USB copy is better with the IF shift control slightly to the left of detent. Voices sound more natural, probably a bit lower in frequency, that way.(Actually,

there is a calibrator built in but only available with an internal jumper, not from the front panel).

I would be interested in properly adjusting this oscillator but not before I am sure I know what I'm doing. (yes, I have a service manual). I like this rig.

The absolute calibration of the frequency readout is within abt 20 Hz of WWV on both sidebands.

I have not checked to see if pitch changes with sideband.

73 Shel WA2UBK dara@physics.att.com

-----  
Date: 26 Mar 93 22:24:53 GMT

From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!darwin.sura.net!mojo.eng.umd.edu!chuck@network.UCSD.EDU

Subject: Nicad Memory Effect-Fact or Myth?

To: info-hams@ucsd.edu

In article <C4IIIr.Goq@ns1.nodak.edu> altenbur@plains (Karl Altenburg) writes:

>Regarding discharging; would discharging a six cell NiCd pack through  
>a mechanical relay and a power resistor be a good idea?

>

>The relay is rated at 5v and has a operating range of 3.4v on and  
>9.5v continuous. This would mean that the relay would close a circuit  
>to the resistors as long as the NiCd pack provided at least 3.4v. Below  
>this voltage the relay would open and the pack would stop discharging.

>

>The real question I have is: Does cell reversing occur at 0.57v per  
>cell?

Cell reversal occurs because the A-H capacity of each cell is typically different. The cell that has the weakest A-H capacity will totally discharge, and be reverse charged by the rest of the cells. The "rule of thumb" that you shouldn't discharge a pack below 1v per cell is just a guide that gives you a little safety factor. You can destroy a pack even if you follow this guide. (hint, higher voltage multiple cell packs are at more risk)

By trying to discharge your pack to 0.57v per cell, you virtually guarantee that one cell will be damaged. When you reverse charge a cell, you cause the infamous "nickel dendrites" to grow. These little nickel needles are what causes a nicad cell to develop a short. You can sometimes blow them out with a high current, but once they have formed, they will always come back.

73,

Chuck Harris - WA3UQV

chuck@eng.umd.edu

-----  
Date: 26 Mar 93 12:08:09 CST  
From: timbuk.cray.com!hemlock.cray.com!cherry10!dadams@uunet.uu.net  
Subject: Q values.  
To: info-hams@ucsd.edu

Could someone explain what a Q value is, pertaining to a tank circuit?

Also I thought I knew how to calculate the resonant frequency of a tank circuit given the inductance and capacitance, but I missed the question on the exam, so perhaps someone could address that. How does the answer change if the capacitor and inductor are in series rather than in parallel?

---  
--David C. Adams Statistician Cray Research Inc. dadams@cray.com

-----  
Old Sourdoughs never die. They just ferment away.

-----  
Date: 26 Mar 93 12:25:35 CST  
From: timbuk.cray.com!hemlock.cray.com!cherry10!dadams@uunet.uu.net  
Subject: Real OFs (Was Re: Real NoCodes)  
To: info-hams@ucsd.edu

In article 6552@cbnewsm.cb.att.com, jeffj@cbnewsm.cb.att.com (jeffrey.n.jones) writes:

|In article <1993Mar25.113435.274@hemlock.cray.com> dadams@cray.com writes:

|>In article 19854@cbnewsm.cb.att.com, jeffj@cbnewsm.cb.att.com (jeffrey.n.jones) writes:

|>

|>> It doesn't take a particular class of license to be a idiot!

|>

|>No, but it helps to be an old fart!

|>

|>It helps if you have the notion that if I succede then you are a failure.

|>It helps to be lifted up in pride.

|>It helps if you try to convince yourself that you are better than others.

|>(Especially if you are better than others at some otherwise insignificant skill.)

|

|I sure hope this wasn't directed at me!

|



|Jeff Jones  
|  
|Another Extra for Nocode!  
|  
|--  
| Jeff Jones AB6MB | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!  
| jeffj@seeker.mystic.com | Canada/USA Free Trade cost Canada 400,000 jobs.  
| Infolinc BBS 415-778-5929 | Want to guess how many we'll lose to Mexico?

oops! I hope it wasn't you!

Some OF sent me this e-mail about how, I'd never be a real extra class ham because the code test I passed was inferior, and that I couldn't really copy a solid minute of code at 20 wpm the way he had to way back when, and that I probably couldn't copy a solid minute at 13 wpm.

I don't remember who it was, and I tried hard to ignore it, but it boiled over in the above blurb. I apologize.

If the OF had been concerned about improving the quality of Ham Radio he would have offered encouragement toward improving my code speed until I could copy a solid 20 wpm.

Who do the airwaves belong to anyway? This OF? Maybe we should just auction them off! (I speak in jest, but if you offend enough people that is exactly what will happen to Ham Radio.)

---

--David C. Adams Statistician Cray Research Inc. dadams@cray.com

-----  
Old Sourdoughs never die. They just ferment away.

-----  
Date: 26 Mar 93 22:21:44 GMT  
From: sdd.hp.com!ux1.cso.uiuc.edu!mingyu@decwrl.dec.com  
Subject: Which keyer chip best?  
To: info-hams@ucsd.edu

In article <1993Mar26.200435.2051@linus.mitre.org> m14494@mwvm.mitre.org (Mike White) writes:

>Joe Smulowicz writes:

>> I need a new keyer, and I'm starting to look around at the various  
>chips out there. Does anyone have a preference?

>

>The Super CMOS Keyer II is the best keyer in the world (Wow, duck those incoming flames!); one chip and about a dozen or so components on a 2x3 inch pc board, and that's it.

>  
>You program it  
>by sending it messages in morse, and it tells you what it's  
>doing by answering in morse! 4 memories, every conceivable  
>feature, including dot/dash memory and auto character spacing,  
>it can even be set to emulate other keyers, including the  
>Accu-Keyer and the Curtis. The pc board kit includes everything  
>you need except batteries (3 penlight cells will power it  
>well into the next century), 4 switches for the memories, and a  
>box to put it in. At \$50, it's a steal. This keyer is written up  
>in the ARRL handbook, along with the name and address of the  
>kit source. 73...  
>  
>Mike, N4PDY  
>  
>\*\*\*\*\*  
>\* These are my opinions only.\*  
>\*\*\*\*\*

I have built one myself, and I concur with everything Mike said. It's a great keyer. By adding a simple interface circuit (bridge rectifier), I am using it keying my ft101, which has tube finals. Idiom Press is also selling an assembled version at \$120.

mingyu,kd4ejr

-----  
Date: 26 Mar 93 19:55:06 GMT  
From: ogicse!uwm.edu!spool.mu.edu!mixcom.com!Robert.Brock@network.UCSD.EDU  
Subject: ~r{d8d8  
To: info-hams@ucsd.edu

W

--

Bob Brock - K9OSC ..... Robert.Brock@mixcom.com

-----  
Date: 26 Mar 93 19:47:22 GMT  
From: ogicse!emory!darwin.sura.net!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1993Mar24.130705.17235@magnus.acs.ohio-state.edu>,  
<1993Mar25.000101.9350@ke4zv.uucp>, <lr6691INN340@news.bbn.com>  
Reply-To : gary@ke4zv.UUCP (Gary Coffman)  
Subject : Re: source for spools of wire

In article <lr669lINN340@news.bbn.com> levin@bbn.com (Joel B Levin) writes:  
>

>One wonders why they would bother to erect a tower inside that fence  
>if the fence itself does so much better! Sounds like they could have  
>saved more money swapping their old transmitter for a cheaper-to-run  
>lower power job, too!

The fence made a great DX antenna (toward the FCC monitoring station),  
but our signal in town was lousy. Since our purpose was to provide  
coverage for our community, we built another tower. It took 3 months  
though, and we stayed on the air doing the best we could in the meantime.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 26 Mar 93 22:54:25 GMT  
From: hobbes!ringo.sco.com!user@uunet.uu.net  
To: info-hams@ucsd.edu

References <1993Mar26.145513.18679@ke4zv.uucp>,  
<VBREAUULT.93Mar26152130@rinhp750.gmr.com>,  
<1993Mar26.213554.12490@news.acns.nwu.edu>  
Subject : Re: Nicad Memory Effect-Fact or Myth?

In article <1993Mar26.213554.12490@news.acns.nwu.edu>,  
lapin@casbah.acns.nwu.edu (Gregory Lapin) wrote:

[...]

>  
> Since I don't use ICOM HTs, all I can add to this discussion is that I have  
> a datasheet on my desk from Benchmarq for their bq2003 "Fast Charge IC".  
> For just under \$6 and the space it takes to put a 16 pin DIP or SOIC, you  
> can have a charger controller that works with either temperatures (changes  
> or absolute), time (changes or absolute), final charging voltage (changes  
> or absolute) OR negative delta voltage (ie. voltage depression).  
>  
> If not yet, pretty soon I'll bet that you will be able to get a wall cube  
> or any other form of charger that is very kind to your nicads (this chip  
> also works with nickel-metal hydride and lead-acid batteries) for not much  
> extra money.

>  
> BTW, you can also program this thing to perform "discharge-before-charge"  
> for "battery conditioning and capacity determination".  
>

Maxim Integrated Products in Sunnyvale (CA) has also intro'ed a family of controller chips for fast-charging NiCd & NiMH batteries: MAX712 and MAX713. The MAX712 detects zero voltage slope while the MAX713 detects negative voltage slope. You can optionally rig it up to detect temperature change. It doesn't seem to have a "discharge-before-charge" option, though.

An evaluation kit (consisting of two MAX713s) costs \$30, phone number is 800-998-8800.

---

Ron Wong	The Santa Cruz Operation	408-427-7128
Net & Comm Segment Mgr/	400 Encinal Street, PO Box 1900	FAX: 425-3544
DevProgram Marketing Mgr	Santa Cruz, CA 95061-1900	
E-mail: ...uunet!sco!ronaldw	ronaldw@sco.COM	

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Date: 27 Mar 93 00:16:24 GMT  
From: amdahl!amdahl!ikluft@uunet.uu.net  
To: info-hams@ucsd.edu

References <1993Mar24.133057.5741@ke4zv.uucp>,  
<59Bb03A3ce8o00@amdahl.uts.amdahl.com>, <1993Mar25.125446.13184@ke4zv.uucp>  
Subject : Re: RFD: reorganization of rec.radio.amateur

gary@ke4zv.uucp (Gary Coffman) writes:

>In article <59Bb03A3ce8o00@amdahl.uts.amdahl.com> ikluft@uts.amdahl.com (Ian Klufft) writes:

>>Most or all of us on the mailing list went to great effort to make sure that  
>>"pushing unwanted topics into other groups" was \*NOT\* a motive for any of the  
>>proposed groups. We looked at specific topics which sustain themselves in  
>>rec.radio.amateur.misc and evolved the proposal from there. Quite some time  
>>went into making a proposal which should be able to succeed if/when  
>>implemented.

>Ian, I believe you, but the effect is the same. By selecting only  
>topics you want in a particular group, the effect is to push unwanted  
>topics into other groups. I don't think you can make that work without  
>moderating the groups. Many hams are broadcasters at heart. At best a  
>number of groups will increase crossposts. At worst the minor groups

>will go largely unused, like policy does now. I'd rather use a threaded  
>reader in one group. The only subgroup that really works is swap, and  
>in the last two days I've seen for sale items in misc and discussions  
>of vertical antenna effectiveness in swap.

Admittedly, the failure of rec.radio.amateur.policy has made a bad example that people will point to and say, "that didn't work, this won't either." It's going to make a bit of an uphill battle for this RFD.

But, I don't believe we're talking about exactly the same problem. r.r.a.policy's failure was probably in the fact that it was an attempt to discard an unwanted topic. That was a mistake but no one at the time had an example to warn them about it. Now we know that discarding unwanted topics doesn't work as a reason to create a newsgroup.

All the proposed newsgroups in this RFD are based on topics which appear to have a base of interested readers out there. So I would compare these with r.r.a.packet rather than r.r.a.policy. And with r.r.a.packet I can point to an example that has worked very well.

I realize this may not convince you. At least you'll now understand that we have the same concern you do that the r.r.a.policy mistake should not be repeated. (I'm pretty sure I can say that for the rra-reorg mail list based on what I saw there.) Though, here's where you and I may differ, I think we can be successful in creating new newsgroups if we make sure the subjects are based on topics which sustain themselves on the newsgroup today.

73 de KD6EUI

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End of Info-Hams Digest V93 #383

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